# 1.0 BACKGROUND INFORMATION

A man-made drainage ditch extends 1,600 feet from Calle Cesar Chavez to Laguna Channel on the north side of the Union Pacific railroad tracks in the City of Santa Barbara (Figure 1). About 520 feet of the lower portion occurs on a parcel recently purchased by the City of Santa Barbara (City), adjacent to El Estero Treatment Plant (Figure 2). This portion of the drainage ditch empties into a steel pipe culvert that extends about 60 feet across another privately owned parcel to Laguna Channel. The drainage ditch collects runoff from areas east and north of Calle Cesar Chavez. Winter runoff in the ditch drains to Laguna Channel; however, low flows are ponded along the eastern 1,000 feet of the channel where the ditch is deeper than at the outlet on City property.

The entire length of the ditch contains introduced annual weeds on the banks. Wetland vegetation consisting of cattails, occurs in patches where there is standing water. The flat land between the ditch and the railroad tracks is mostly devoid of vegetation. The northern bank between the ditch and the fencing demarcating the adjacent properties is dominated by weedy species. The water in the ditch is stagnant and polluted, as evidenced by oily film and debris. The weedy growth on the banks show extensive evidence of use by homeless people, including debris, fecal matter, and encampments. Despite this disturbance, a population of the southwestern pond turtle occurs in and near ponded areas of the ditch.

Cattails, a native wetland plant species, are rooted in the bed of the ditch where there are saturated soils or shallow water. The following other plants occur on the banks of the ditch and in all other areas of the ditch that are dry: castor bean, yellow sweet clover, wild radish, milk thistle, ragweed, saltgrass, Bermuda grass, wild lettuce, mustard, and wild fennel. All of these species, except for the saltgrass, are introduced upland weeds. Castor bean and wild radish are the dominant plants at the site. Several eucalyptus trees and a large palm tree are present. See attached photographs of the ditch.

In March and April 1999, the portion of the drainage ditch on the City's property was cleared of vegetation and debris and a 20-foot-long extension was added to the existing culvert. The ditch was not filled, reshaped, excavated or re-aligned. Only minor scraping of the ground surface was involved in removing the vegetation. Earthmoving equipment was used. On April 30, 1999, the City of Santa Barbara Planning Division informed the City of Santa Barbara Public Works Department that a Coastal Development Permit was required for the vegetation clearing, and that an application for restoring the site was required.

# 2.0 CURRENT CONDITIONS ON THE CITY PARCEL

The ditch on the City's parcel is a relatively uniform trapezoidal channel with a top width of 20 feet (range = 15 to 25 feet) and a bottom width of five feet (range = 3 to 8 feet). The channel has an average depth of about four feet. Total estimated length on the City property is 520 feet. Total ditch area from top of bank to top of bank is estimated at 10,400 square feet (0.24 acre). Total channel bottom area is about 2,600 square feet (0.06 acre).

Although the ditch was cleared in April 1999, there are abundant young plants that have become established from seeds in the ground, consisting of wild radish plants on the banks and castor bean plants in the channel bottom. Photographs of the site are included in Appendix A.

# 3.0 APPLICABILITY OF COASTAL ACT TO DITCH CLEARING

#### 3.1 Need for Permit

The ditch is zoned Ocean-Dependent Manufacturing (OM-1, SD-3) and is located in the Coastal Zone. The Coastal Act and Santa Barbara Municipal Code consider grading and the "removal ... of any material" to be development that is subject to the permitting requirements of the Coastal Act, the City's Local Coastal Plan (LCP), and the Santa Barbara Municipal Code. As such, a Coastal Development Permit (CDP) is required for the vegetation clearing. The Planning Division has indicated that resolution of this violation can be achieved by applying for a CDP to restore the ditch.

#### 3.2 Presence of Wetlands

The Coastal Act defines wetlands broadly: as "... lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens [Section 30321]" The ditch includes areas that contain ponded water and emergent wetland plants consisting of cattails. These areas represent "wetlands" as defined by the Coastal Act. They are primarily located east of the City's parcel where the channel is deeper.

Wetlands were present on City's property prior to the clearing; however, they probably occupied a very small area based on the following evidence:

- Only a minor amount of ponded water and a few mature cattails were observed in the ditch by workers on the City's parcel during the ditch clearing. No wetland vegetation was observed in the ditch based on photographs of the ditch prior to clearing.
- A May 27, 1998 air photo of the project site indicates little, if any, ponded water and associated marsh habitat on the City's parcel.
- Only a small, 50-foot long area of saturated soils with minor ponding is present in the cleared ditch at this time, located at the eastern end of the City's parcel.
- Plants that are re-colonizing and re-sprouting in the ditch after clearing consist primarily of introduced weeds – wild radish and castor bean. Only a few scattered cattail plants are resprouting, all of which are located in the single patch of soggy soils noted above.

Based on the available evidence, it is postulated that wetlands (defined as areas with cattails and standing water or saturated soils for most of the year) were only present along a single portion of the ditch, encompassing no more than 100 linear feet of the channel. Most of the channel bottom on the City property would have: (1) water or saturated soils only during period of winter runoff; and (2) been dominated by a non-wetland plant, castor bean. Any wetland present would be

restricted to the bottom of the ditch, and would not have extended along the banks or in adjacent uplands where saturate soils would be absent. Hence, the lateral limits of the wetland would be the toe of the banks. If the wetlands in the ditch were restricted to a 100-foot long reach with a five-foot width on the channel bottom, the total area of wetland affected by the clearing would have been 500 square feet (0.01 acre).

#### 3.3 Presence of EHSA

Section 30107.5 of the Coastal Act defines "Environmentally sensitive area" as "... any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." In the Coastal Act, "environmentally sensitive area" is synonymous with "environmentally sensitive habitat area" (ESHA). Wetlands represent a special form of ESHA, with a generally higher sensitivity than other ESHAs.

The entire ditch from Calle Cesar Chavez would be considered an ESHA under the Coastal Act and the City LCP for the following reasons: (1) it contains scattered wetland patches; and (2) it supports a locally sensitive and rare species, the southwestern pond turtle. The latter is not considered rare and endangered, but is scarce within the City limits. The pond turtle is generally considered a sensitive species by the County of Santa Barbara and Department of Fish and Game. The ditch on the City's parcel is unlikely to have supported a large enough ponded area for the turtle; in addition, only a small wetland area appears to have been present. As such, the characteristics of the ditch on the City parcel, by themselves, may not have met criteria for an ESHA. However, the ditch on the City parcel is contiguous with two other ESHAs (the eastern portion of the ditch and Laguna Channel), and as such, should be considered part of a larger ESHA.

# 3.4 Policies Regarding Development in Wetlands and EHSAs

The Coastal Act only allows certain types of development in a wetlands. There are eight allowable uses of wetlands specified in Section 30233, including "....(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland... (5) Incidental public service purposes, including but not limited to, burying cable and pipes or inspection of piers and maintenance of existing intake and outfall lines....(7) Restoration purposes. ...." None of the eight uses include clearing for flood control, development of public facilities, or amelioration of a public safety hazard or nuisance. Based on this policy, clearing the vegetation from the ditch would only be permitted for the following purpose:

Restoration Purposes. The Coastal Act allows the disturbance of wetlands, if restoration is the primary purpose of the project. The CCC's 1981 Interpretive Guidelines state: "Restoration projects which are a permitted development in Section 30233 (a) (7) are publicly or privately

financed projects in which restoration is the sole purpose of the project.... projects which provide mitigation for non-permitted development may not be broadly construed to be restoration projects in order to avoid the strict limitations of permitted uses in Section 30233...." The clearing of the ditch can be permitted if the sole purpose of the project is to restore or enhance the habitat values and functions of the ditch. This purpose can be accomplished by removing the weedy species from the ditch and replacing them with native species. The habitat values of the ditch would be improved over time compared to existing conditions.

Section 30240(a) of the Coastal Act states that "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." The ditch represents an ESHA, as well as a wetland. Hence, this policy would only allow development in the ditch that is dependent on the habitat functions at the ditch. In essence, this policy restricts allowable uses in an ESHA to habitat protection, enhancement, or restoration.

#### 4.1.1 Project Objectives

The objectives of the project are to restore the wetlands in the ditch on City property, and to significantly enhance the wetland and ESHA functions of the ditch compared to existing conditions. The project only includes restoration of habitat, that is, no other purpose or land use is included in the project. The primary elements of the project are listed below and shown on Figure 3.

- Restore and enhance the physical configuration of the drainage to facilitate ponding of water and to create islands for turtle basking, and if possible, to create a more direct connection for turtle movement between the side drainage and Laguna Channel
- Revegetate the drainage with native wetland and riparian plants; remove all weeds
- Create a buffer zone on each side of the drainage and revegetate with native riparian plants
- Protect the drainage from human entry and place the land in protected status

#### 4.1.2 Channel Improvement

In order to achieve the project objectives, the channel on the City parcel would be modified to impound shallow water along most of its length to create turtle habitat. The channel bottom would be lowered 1 to 2 feet below existing grade (see Figure 4) to ensure that water will not be discharged to Laguna Channel except during winter flows. Lowering of the channel invert would create turtle habitat where none was present before. The ditch currently impounds water along its eastern end outside the City's property due to low points in the channel invert.

The bottom of the channel would also be widened from about 5 feet to 8 feet in order to increase the wetted area and create more emergent wetlands (Figure 4). The slope of the banks in the modified channel would be the same as in the original channel. The overall width of the channel, from top of bank to top of bank, would be about 26 feet, compared to 20 feet under current conditions. Small earthen islands would be created at several locations along the channel to provide refugia for turtles (Figure 3).

One of the key project objectives is to create a more direct connection for turtle movement between the side drainage and Laguna Channel. This can be accomplished by abandoning the existing buried culvert and relocating the channel to the center of the parcel. At this location, a new outlet to Laguna Channel can be created, as shown on Figure 3. The connection would be established by first purchasing an easement from Union Pacific for a small area between the City's parcel and Laguna Channel. The eastern bank of Laguna Channel would then be modified to create a gentle ramp from the channel to the ditch. A rectangular concrete culvert would be installed at the end of the ditch that would allow turtles to move freely to and from the ditch. The culvert would be installed at the same elevation as the current steel pipe culvert located to the north.

Creating a similar ramp and rectangular culvert would be more difficult and expensive if the channel were left in its current location due to the following reasons:

- 1. More grading would be required at the location of the existing culvert.
- 2. The City would have to purchase an easement or fee title over a larger parcel at this location. As shown on Figure 3, there is a private parcel located at the west end of the City's parcel. The proposed culvert would avoid the private parcel and the possible need to purchase more land or easement than is required for the ramp and culvert.
- 3. The City would need to purchase and remove the small wooden bridge leading to the private parcel to install the ramp and culvert.

It is estimated that about 1,200 to 1,500 cubic yards would be excavated to create the new ditch and used to fill the original ditch. The grading would be a balanced cut and fill, with no import or export of material.

### 4.1.3 Restoration of Wetland and Riparian Habitats

Wetlands would be restored along the entire length of the channel, increasing the linear distance of wetlands from 100 to 520 feet. This would increase the wetland area in the bottom of the ditch from 500 square feet (with a five foot channel bottom width) to 4,160 square feet or 0.09 acre (with an eight foot channel bottom width). The proposed restoration would also include establishing wetland plants on the two 10-foot wide banks (encompassing about 10,400 square feet or 0.24 acre) and native riparian plants in a buffer zone on each side of the drainage.

The width of the buffer zone on each side of the channel has been maximized by locating the new channel in the center of the parcel. The width ranges up to 50 feet on the south side and 90 feet on the north side. A uniform width of 50 feet or more could not be established on each side of the relocated ditch without encroaching into the El Estero facilities on the north and the railroad right-of-way on the south. Hence, the width and total amount of buffer zone have been maximized to the extent feasible. The total buffer zone area is about 0.79 acre.

The total new wetland and riparian habitats in the 1.1-acre parcel would consist of 0.33 acre of new wetlands in the channel, and 0.79 acre of riparian habitat in the buffer zone. Prior to clearing the ditch, the cattail-dominated wetland only occupied about 0.01 acre in the bottom of the ditch. The saltgrass on the banks of the ditch was not subject to periodically saturated soils or standing water, and as such, did not represent a functioning wetland. In contrast, the proposed restoration would result in the creation of more than one acre of <u>new</u>, self-sustaining native wetland and riparian habitats.

# 4.1.4 Planting Scheme and Plant Mixes

The overall planting scheme is shown on Figure 5. The objective of the design is to create a seminatural configuration of native plants that allows for open water and open spaces between plants where turtles can bask (in or near the water) and create nesting locations (in open, warm areas) in the buffer zone. Hence, the planting scheme and density are designed to cover about 50 percent of the land with shrubs and perennial plants that will create shade and shelter, and to seed the intervening open areas with native grasses. Shrubs and perennial plants would be installed in accordance with specified densities, but would be placed in the field in non-uniform spacing to create a more natural appearance. The new habitats would exhibit a mosaic of open and shaded areas. The latter areas would consist of shrubs and perennial herbs that would not exceed five to six feet in height. A mixture of woody upland and riparian shrubs would be used in the buffer zone to provide a physical barrier. In addition, several clumps of willow and cottonwood trees would be planted in the buffer zone as shown on Figure 3 to increase the structural diversity of the habitats.

Five plant mixes are proposed and are listed in Table 1. All of the plants are native and common along the South Coast. The proposed density and number of plants for the channel bottom, bank, and buffer zone are presented in Table 1, as well as the planting method.

In addition to installing native plants, the City will also place three to five wooden stems from downed trees across the channel to provide basking sites in ponded areas, as shown on Figure 5.

# 4.1.5 Restoration Schedule and Order of Work

The restoration would be conducted in the September or October 2000, prior to the winter rains. The restoration cannot be implemented in the fall of 1999 because it will be necessary to custom order the native plants, which will require a lead time of 6 to 9 months. Immediately after issuance of a CDP, the City would place orders for the seeds and container plants needed for the project with one or more native plant nurseries in the region, for delivery in the fall of 2000. To the extent feasible, the City will request that all plant and seed stock be derived from the central coast region.

Restoration cannot begin until the fall of 2000 because it will require a year or more to acquire an easement from Union Pacific for the new outlet to Laguna Channel.

Prior to grading the ditch in the fall of 2000, the City would remove all weeds at the site through 2 to 4 treatments of herbicide. The first herbicide treatment would occur immediately. After spraying and killing the existing weeds at the project site, the area would be watered to germinate weed seeds that are present in the soil. The emergent plants would then be sprayed with an herbicide. This treatment would be repeated during the winter of 1999-2000, and the spring and summer of 2000. By the fall of 2000, it is anticipated that most of the weed seeds in the soils will have been killed.

In September or October 2000, the ditch would be graded and the new culvert would be installed. During construction, water from the eastern portion of the ditch outside the City's property, will be

blocked by a temporary cofferdam. No later than December 15, 2000, container plants would be installed followed by seeding of the unplanted areas. A temporary irrigation system would be installed for use during the first several years. A 6-foot high chain link fence with wooden slats and barbed wire at the top would be installed around the south perimeter of the parcel, similar to the existing fence around El Estero. Two rows of concrete cinder blocks, or similar material, would be installed around the base of the fence and buried to a depth of eight inches to prevent turtles from burrowing out of the site towards the Union Pacific railroad tracks, and to prevent entry by humans and predators. A wooden rail fence about three feet high would be installed on th north side of the parcel.

#### 4.1.6 Planting and Seeding Methods

Container and liner plants will be installed in holes dug 1.5 times the depth of the container or liner, and twice the width of the root ball. Holes will be hand-dug or augered. Holes will be filled with water prior to planting if they are dry. Plants will be placed in the holes and backfilled by hand. Bankfill will consist of native soils with 15 percent fine mulch mixed in the soil. The level of the soil around the root ball will match the surrounding grade. A small 2-3 inch high berm will be created around the hole of each plant, then filled with coarse mulch for weed control. Plants will be watered immediately after planting.

Seeds will be either hand broadcasted, or hydroseeded. If the former method is used, seeds will be raked into the soil ¼ inch, and a tackifier will be applied afterwards to prevent erosion from rainfall and runoff in the ditch. Hydroseed mixtures will contain a tackifier and soil binder.

#### 4.1.7 Plant Maintenance and Monitoring

The City will install a temporary irrigation system with broadcast emitters to be used during the first and second years to ensure successful germination and plant establishment. The frequency and duration of irrigation will be determined by the landscaping contractor that installed the plants. The irrigation system will be retained for additional years, if it is necessary to further support the establishment of plants by supplemental watering.

The City will remove weeds from the restoration site on an ongoing basis, as part of the maintenance of the landscaping at El Estero. Weeds will be removed by hand or by selective spraying with Rodeo<sup>tm</sup> which is approved for use near aquatic habitats. Weeding will occur at least three times per year, or more frequently, if necessary.

All installed plants must achieve an 80 percent survival rate by the end of the first year, and a 95 percent survival rate of the remaining plants by the end of the second year and third years. If the survival goals are not met, the City will replace failed plants to meet the original plant densities. The City will conduct semi-annual surveys of plant survivorship to assess performance during the first three years. If the survivorship goals are achieved by the third year, the monitoring will be terminated. Monitoring will continue only for replacement plants after the third year.

#### 4.1.8 Habitat Management

In addition to the maintenance of installed plants and weeding described above, the City will maintain an appropriate water regime in the ditch to provide suitable conditions for the western pond turtle. Open areas of ponded water will be maintained by pruning or removing any plants encroaching into the ponds (e.g., cattails) and by removing any buildup of sediments or debris in the bottom of the channel. Prior to work in the channel, the City will retain a biologist to temporarily move turtles from the work area if they are present. The work will be performed by hand crews, or if necessary, by mechanized equipment working from the banks, and will be performed during the period August through March which is outside the turtle and breeding bird season.

The City will inspect the integrity of the fence on a regular basis and make repairs as necessary to prevent human and predator entry.

#### 4.1.9 Flood Control

The City will also remove vegetation and sediments from the channel bottom that appear to seriously impede flows and possibly cause flooding at the project site during high winter flows. The frequency and amount of vegetation and sediment removal are unknown at this time. However, it is anticipated that channel maintenance for conveyance purposes would only be required every 3 to 5 years. Prior to any channel maintenance, the City will retain a biologist to temporarily move turtles from the work areas if they are present. The work will be performed by hand crews, or if necessary, by mechanized equipment working from the banks, and will be performed during the period August through March which is outside the turtle and breeding bird season.

#### 5.0 BENEFITS OF THE PROJECT

The proposed restoration project, involving the relocation of the channel, would facilitate the connection of the ditch to Laguna Channel, thereby allowing turtles to move to and from the ditch. This action will substantially increase the functions and values of the ditch for western pond turtle, which is the basis for its ESHA status. In addition, the wide buffer zone on the both sides of the channel would provide more opportunities for turtle nesting and foraging compared to current conditions.

The proposed project will result in a thirty-fold increase in wetlands at the project site and the development of 1.1 acres of new wetland/riparian habitat. It will provide refugia for turtles in a protected and inaccessible area with controlled water levels and habitat managed for their shelter and nesting needs. As such, the project will have an overall benefit to the turtle population along the ditch outside the City property, and along Laguna Channel.

The proposed buffer zone will be wider than the prior band of upland vegetation adjacent to the ditch, and will be dominated by native plants rather than by weeds. In addition, the buffer zone will not be accessible by homeless people for encampments and dumping, as was the area next to the ditch prior to the violation.

The City believes that the proposed restoration project will not only fulfill the requirements of a restoration project as defined in the Coastal Act, but will also address any additional mitigation requirements due to the origin of the project, i.e., a permit violation.

# TABLE 1 PLANT MIXES FOR THE LAGUNA CHANNEL SIDE DRAINAGE RESTORATION PROJECT

Scientific Name	Common Name	Planting Form	Density	Total
		, -		Number of
				Plants
PLANT MIX A - EM	ERGENT WETLAND	PLANTS IN CHANN	EL BOTTOM	
				·
Plant in clumps over	40 percent of the chan	nel bottom at the indica	ated densities	
Total number of plants = 294. Equivalent density = 3.5-foot centers				
(0.09 acre total to be	planted)			
Eleocharis parishii or	Spikerush or	1-gallon containers	4-foot centers	98
Juncus patens	common rush	or liners		
Typha latifolia	Cattail or tule	1-gallon containers	4-foot centers	98
		or liners		
Scripus cernus	Low club rush	1-gallon containers	4-foot centers	98
		or liners		

PLANT MIX B - RI	PARIAN PLANTS O	N BANKS		
	nts = 307. Equivalent	covering 50 percent of the thickness of the total total terms of the terms of the total terms of the terms of the total terms o		
Artemisia douglasiana	Mugwort	1 gallon container	6-foot centers	145
Cyperus eragrostis	Umbrella sedge	1-gallon containers or liners	8-foot centers	81
Elymus condensatus	Giant ryegrass	1-gallon containers	8-foot centers	81

PLANT MIX C - SALTGRASS COVER ON BANKS				
Seed 50 percent of the banks (0.24 acre total, including both sides)				
Distichlis spicata	Saltgrass	Seeds or rhizomes	Complete	Rate of 15
Z volument of the second			coverage	lbs per acre
Melica imperfecta	Small flowered melic	Seeds	Complete	Rate of 15
ing or in port			coverage	lbs per acre

Scientific Name	Common Name	Planting Form	Density	Total Number of Plants
PLANT MIX D - UPLAND GRASSES IN BUFFER ZONES				
Seed 50 percent of the buffer zone (0.78 acre total, including both sides)				
Bromus carinatus	California brome	Seeds	Complete	Rate of 30
			coverage	lbs per acre

PLANT MIX E - UP	LAND SHRUBS IN	THE BUFFER ZONES		
Plant in clumps at the Total number of plan (0.78 acre total, inclu	ts = 919. Equivalen	covering 50 percent of t t density = 6-foot center	he buffer zone s	
Rosa californica	California rose	1-gallon containers	10-foot centers	170
Sambucus mexicana	Elderberry	5-gallon containers	20-foot centers	49
Clematis ligustificifolia	Creek clematis	5-gallon containers	10-foot centers	170
Rhamnus crocea	Redberry	5-gallon containers	8-foot centers	265
Mimulus aurantiacus	Sticky monkey flower	1-gallon containers	8-foot centers	265

Total areas: channel (0.09 acre), banks (0.24 acres), and buffer zone (0.78).

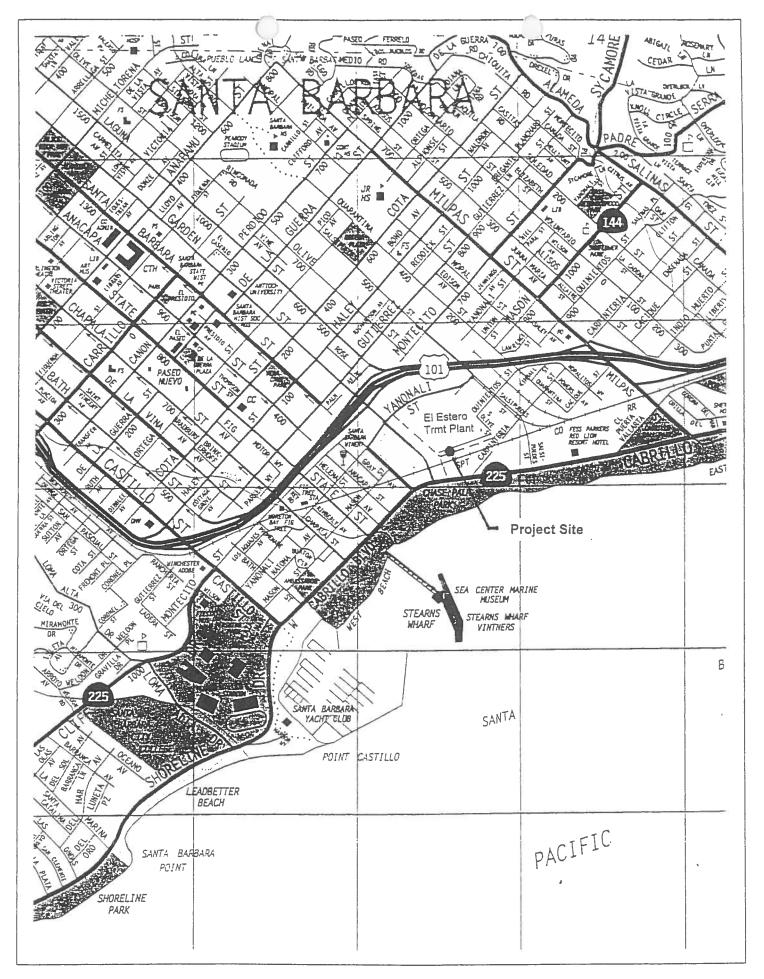
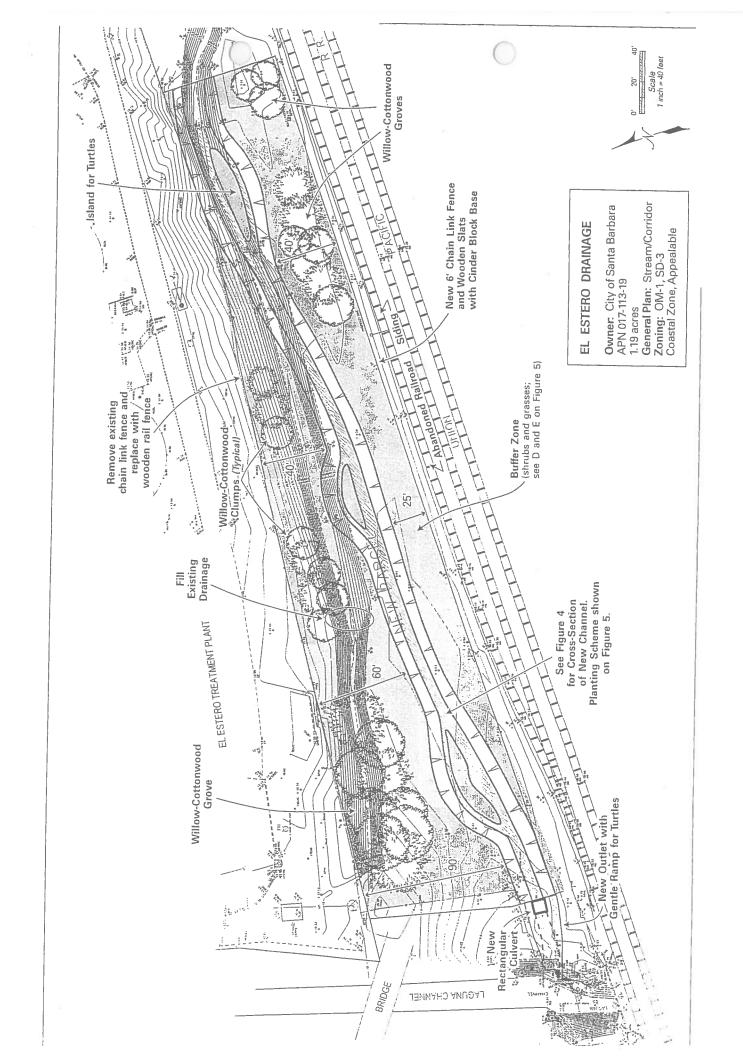
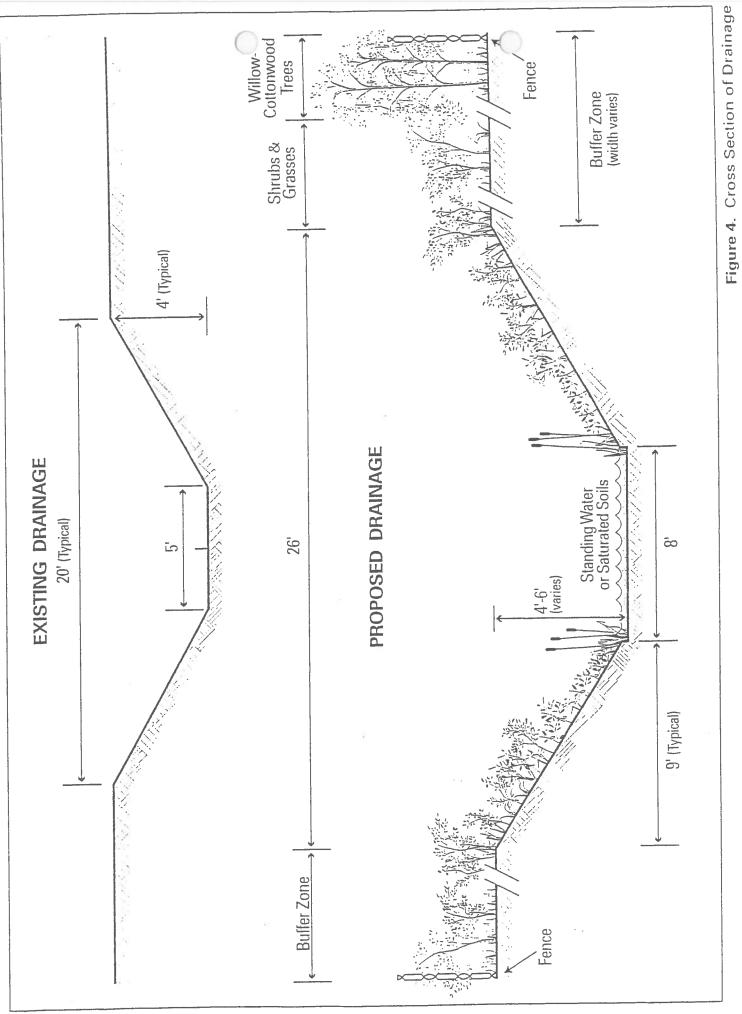
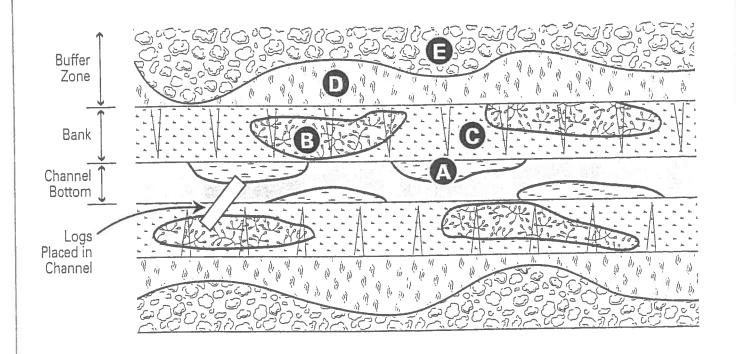


Figure 1. Project Site





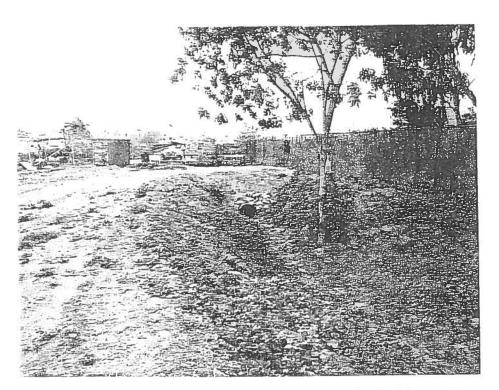


PLANT MIX	NAME		
- A-	EMERGENT WETLAND PLANTS		
B	RIPARIAN PLANTS		
G	SALTGRASS		
<b>D</b>	UPLAND GRASSES		
7 <b>E</b> 5	UPLAND SHRUBS		
See attached description of species for each mix and proposed planting densities			

Figure 5. Planting Scheme

## APPENDIX A

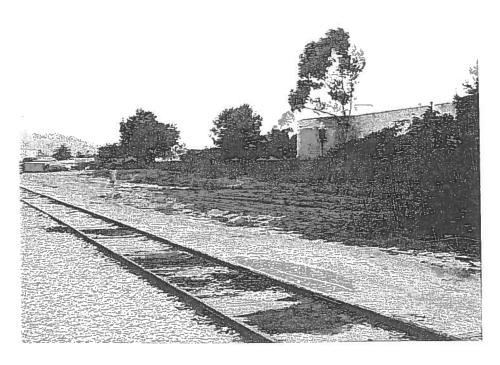
Photographs of the El Estero Drainage Ditch After Clearing and Other Unaffected Portions of the Ditch



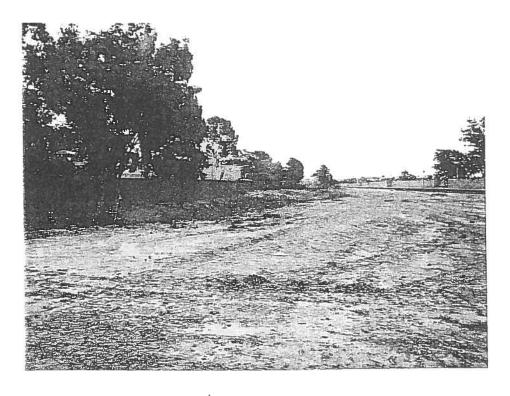
View of drainage ditch from the top of south bank, looking to the west. The culvert inlet is visible in the photo.



View of the drainage ditch from the top of bank, looking to the east. El Estero is on the left side of the photograph, and the railroad is on the right.



View of the project site, looking to the northwest. El Estero is in the background.



View of the project site, looking to the east. El Estero is on the left side of the photograph.



# CITY OF SANTA BARBARA

# **Public Works Department**

# Interoffice Memorandum

DATE:

May 19, 1998

TO:

Don Irelan, Senior Real Property Agent

FROM:

Tony M. Raya, Environmental Programs Supervisor

SUBJECT:

PHASE I AND II ENVIRONMENTAL SITE ASSESSMENT FOR THE 3.4 ACRE PROPERTY AT 110 SOUTH CALLE CÉSAR CHÁVEZ, SANTA BARBARA, CA

I have reviewed the Phase I & II Environmental Site Assessment (ESA) report for the above subject property. The report is comprehensive and raises no red flags about this property. The historic usage of this site appears to be limited to equipment storage in the early 1960's and to the current usage by Lash Construction. No underground storage tanks exist on site and violations, injunctions, or other corrective actions pertaining to hazardous materials use, handling, or storage were not found in relation to this site.

Dames & Moore conducted a limited soil, groundwater, and surface water sampling as part of the Phase II ESA. The limited study was targeted to the soil conditions of the area dealing with the construction equipment around the eastern portion of the site and the soil conditions beneath an old gasoline pump dispenser found on the western portion of the site.

A total of 10 soil borings were installed and soil samples were collected from all ten borings. Selected soil samples were analyzed for Total Petroleum Hydrocarbons gas (TPH/gas), Total Petroleum Hydrocarbon carbon chain (TPH/cc, plus Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), others for CAM Metals. Ground water samples were collected from four of the ten borings and analyzed for TPH/gas and BTEX.

The Phase I and II ESA indicates that the soil samples analyzed had detected concentrations of TPH/cc ranging from 100 parts per million (ppm) to 1,100 ppm. The TPH clean-up level for Leaking Underground Fuel Tanks for TPH/gas is 100 ppm. However, the trace to non-detectable levels of BTXE and TPH/gas indicates that the TPH is associated with heavy oils, such as natural crude, or from degraded TPH which has been present a long time. In addition, the County Of Santa Barbara, Protection Services Division, does not have at this time an established action level for Heavy Oils or TPH/cc. The groundwater samples did not show any significant detection of either TPH/gas or BTEX.

In my opinion all indications from the Phase I and II ESA are that the property is free of any contamination that could cause the City any concern with the future ownership or development of said property.

If you have any questions please contact me at extension 5371.

TR/jd

Enclosure:

Copy of Phase I and II ESA by Dames & Moore for the 110 south Calle César Chávez

cc:

(w/o enclosure)

John Schoof, Principal Civil Engineer

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Archive No.

Project No.